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KEY TO SOME COMMON FOREST-ZONE PLANTS OF NORTHWESTERN WASHINGTON

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R6-ECOL-006



KEY TO SOME
COMMON FOREST ZONE PLANTS OF NORTHWESTERN WASHINGTON

R6-Ecol-006 February, 1974

Frederick C. Hall

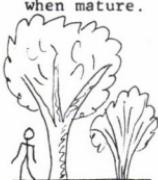
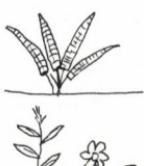
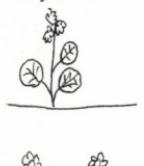
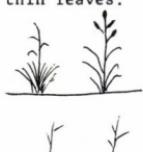
Only two steps are required to use this key:

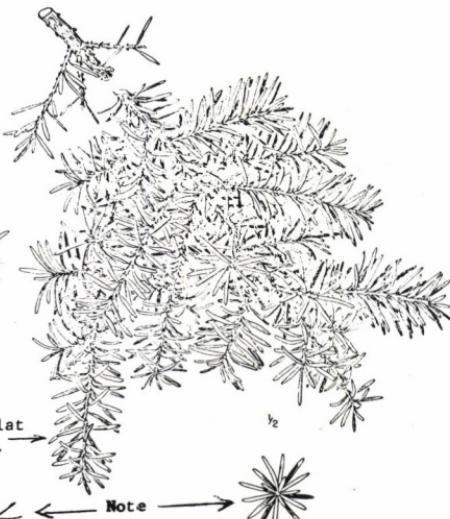
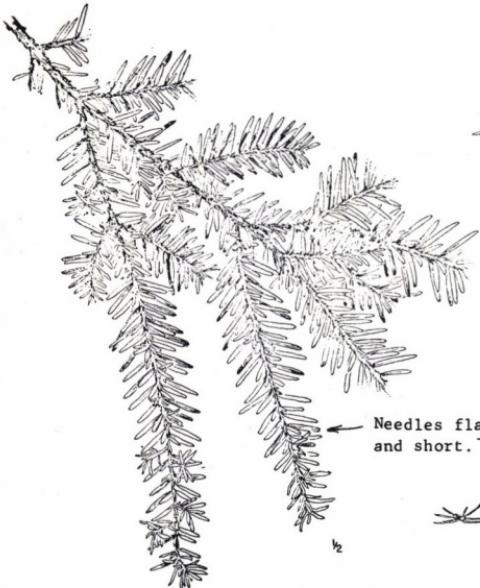
1. Compare the plant to diagrams below to decide if it is a coniferous tree, hardwood tree, tall shrub, low shrub (less than 5 feet tall) or woody plant, a forb or broad leaved plant, or a grass or grasslike plant including sedges.
2. Look in the appropriate section for a picture that resembles your unknown plant.

This key contains 115 of the most common plants found in the forest zone and sub-alpine forest in Northwestern Washington State, including the Mt. Baker-Snoqualmie and Olympic National Forests. The careful observer will often find plants that cannot be identified with this key. He is referred to the authority publication from which this key was abstracted: Hitchcock et.al., VASCULAR PLANTS OF THE PACIFIC NORTHWEST. Parts 1, 2, 3, 4 and 5. Univ. Wash. Press.

Notes about each species are arranged as follows: Special identifying characteristics are listed adjacent to the diagram. "SITE" items pertain to timber productivity, tree regeneration problems, soil moisture or temperature, disturbance, or other important or unique environmental indications. "ANIMALS" pertains to the plant's palatability or poisonous plant for cultivation in gardens west of the Cascade crest. "OTHER" is a catchall for other information particularly edibility of the fruit or plant by people or other interesting information.

Primary references for each item are: SITE - Franklin, Jerry F. and C.T. Dyrness. 1973. NATURAL VEGETATION OF OREGON AND WASHINGTON. USDA, Forest Service. General Technical Report PNW-8. ANIMALS - Brown, E.R. 1961. THE BLACKTAIL DEER OF WESTERN WASHINGTON. Wash. State Game Dept., Biological Bull. No. 13. Gilkey, Helen M. 1958. LIVESTOCK POISONING WEEDS OF OREGON. O.S.U. Agri. Exper. Stat., Station Bull. 564. GARDEN - notes from the authority publication. OTHER - Kirk, Donald. 1970. WILD EDIBLE PLANTS OF THE WESTERN STATES. Naturegraph Pub., Healdsburg, California. Hardin, J.W. and J.M. Arena, M.D. 1974. HUMAN POISONING FROM NATIVE AND CULTIVATED PLANTS. Duke. Un. Press. Durham, N.C.

CONIFEROUS TREES	HARDWOOD TREE OR TALL SHRUB	SHRUBS LESS 5 ft. TALL	FERNS AND LILLIES	FORBS AND OTHER FLOWERS	GRASSES AND SEDGES
Evergreen tree with needles.	Broad leaved tree or shrub over 5 ft. tall when mature.	Shrub less than 5 ft. tall when mature, low shrubs.	Fern or plant with lilly-like leaves.	Plants with broad leaves and often showy flowers.	Grasses, sedges and other plants with long thin leaves.
					
					



Mountain hemlock (Tsuga mertensiana)
 SITE: upper elevation, timberline, cold soils, regeneration problems.
 OTHER: tea from fresh needles, tannin from bark.

Western hemlock (Tsuga heterophylla)

SITE: Sea level to mid elevation, good to high timber productivity, easy to moderately easy regeneration.

ANIMALS: moderately palatable to big game.

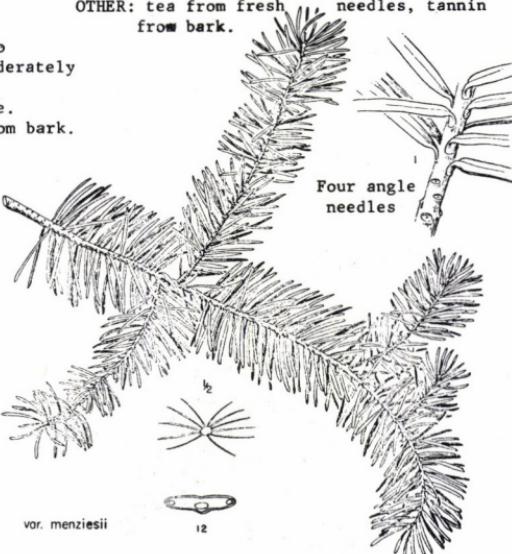
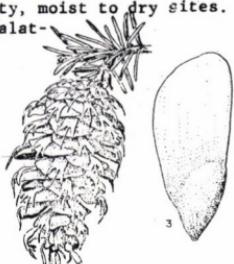
OTHER: tea from fresh needles, tannin from bark.

Douglas-fir (Pseudotsuga menziesii)

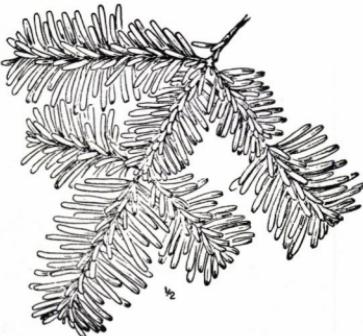
SITE: Sea level to near sub-alpine, no kind of regeneration indicator, fair to high timber productivity, moist to dry sites.

ANIMALS: Moderately palatable to big game.

OTHER: tea from fresh needles.

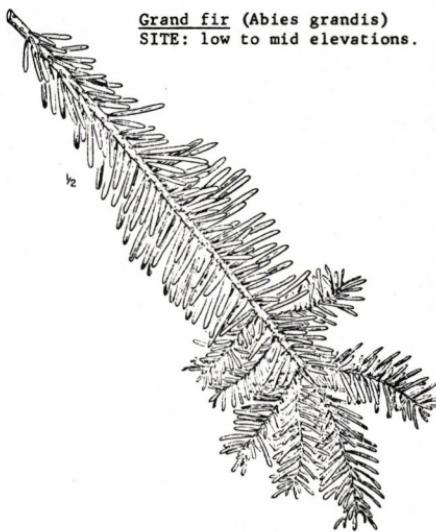


Pseudotsuga menziesii

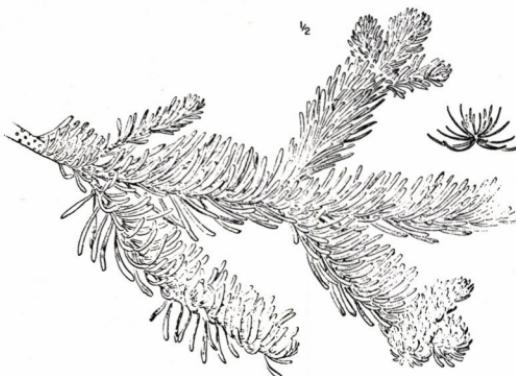


Silver fir (*Abies amabilis*)

SITE: Mid to upper elevations; regeneration problems when big huckleberry, beargrass dominate understory.

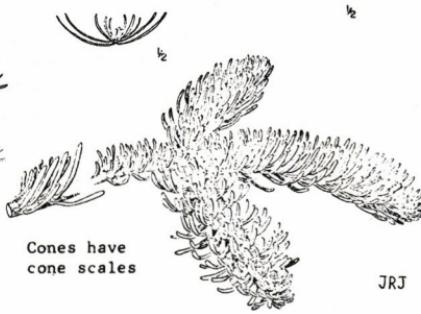


Grand fir (*Abies grandis*)
SITE: low to mid elevations.



Sub-alpine fir (*Abies lasiocarpa*)

SITE: upper elevations to timberline; drier sites than mountain hemlock or silver fir; regeneration problems.



Noble fir (*A. procera*)

SITE: mid to upper elevations, similar distribution in elevation to silver fir.

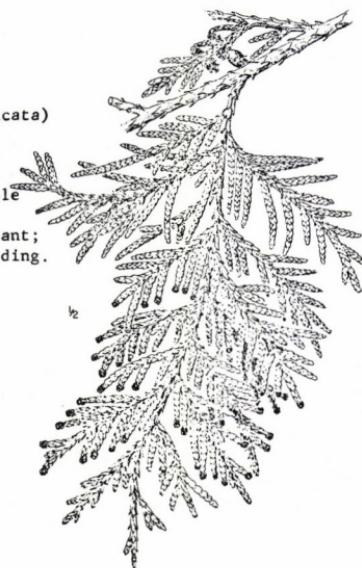
JRJ



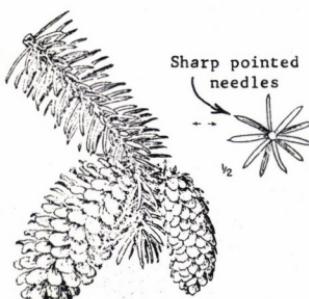
Alaska cedar (*Chamaecyparis nootkatensis*)
SITE: mid to upper elevations

1/2

Western red cedar (*Thuja plicata*)
SITE: moist to wet sites,
lower elevations to sea
level, shallow rooted.
ANIMALS: moderately palatable
to big game.
OTHER: wood very rot resistant;
shingle and unpainted siding.



1/2



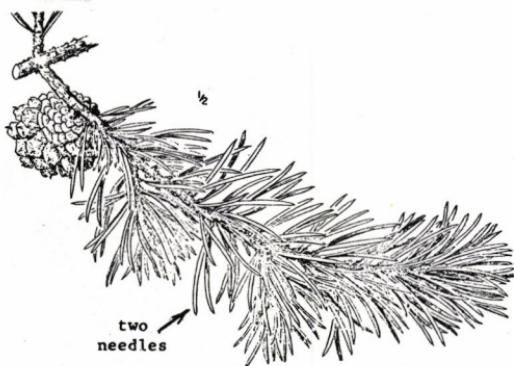
Sharp pointed
needles

1/2

Sitka spruce (*Picea sitchensis*)
SITE: Sea level to lower elevations along the coast;
ANIMALS: Susceptible to defoliation by red spider and
to malformation by spruce gall.
OTHER: Excellent wood structural qualities, once used
in aircraft construction (still used in Bellanca!),
now used in sailboat masts and booms.

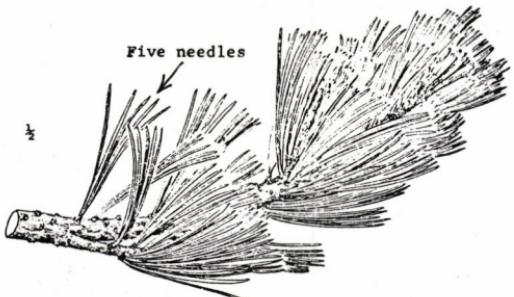


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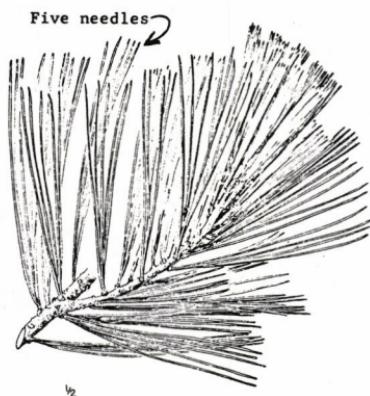
Lodgepole pine (*Pinus contorta*)

SITE: Two disjunct locations: along the coast (shore pine) and mid to upper elevations in the mountains - pioneer species following fire; also tends to indicate serpentine geology with a very sparse plant community and special ground vegetation (the ferns rock brake and holly fern).



Whitebark pine (*Pinus albicaulis*)

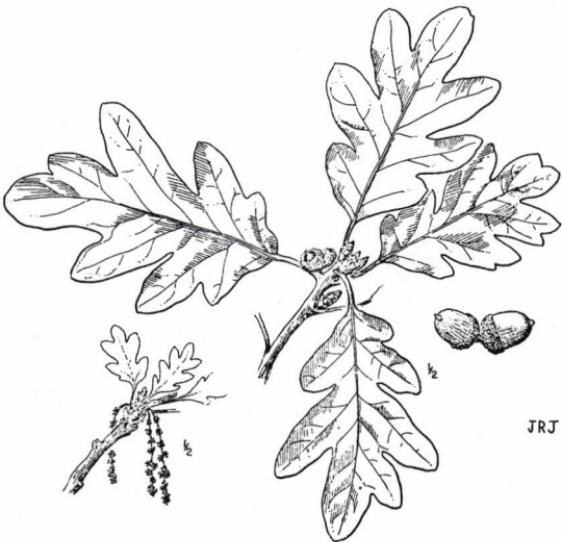
SITE: Sub-alpine, timberline, scattered above timberline as shrubs, highest tree on the mountains; non-commercial forest site.



Western white pine (*Pinus monticola*)

SITE: mid to upper elevations; pioneer species following fire or other severe disturbance; requires clearcutting type of silviculture for regeneration.

OTHER: Strongly susceptible to blister rust.

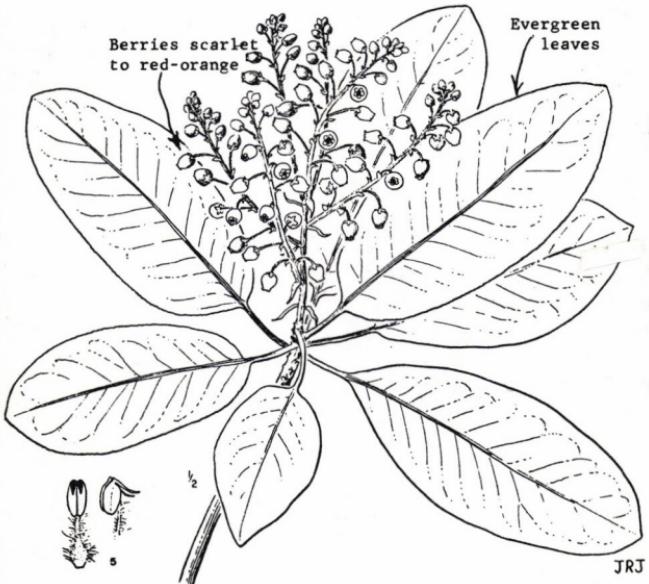


Oregon white oak (*Quercus garryana*)

SITE: Driest forest sites, often grass ground vegetation, Douglas-fir often found "invading" oak stands; severe regeneration problems for fir, moderate for oak (sprouts after cutting).

ANIMALS: acorns mast for big game, birds, can be eaten by people but should be boiled to remove tannic flavor.

OTHER: acorns palatable when cooked.



Madrone (*Arbutus menziesii*)

SITE: very dry sites, just slightly better than oak, often grows with oak; Douglas-fir often found "invading" madrone stands; severe regeneration problem for fir;

ANIMALS: Some palatability for big game when sprouting.

GARDEN: prime tree due to shiny evergreen leaves, bright fruit, and cinnamon colored, peeling bark.

OTHER: Fruit eaten raw, boiled, steamed, puddings, wine, can boil and dry berries for long storage.



Bigleaf maple (*Acer macrophyllum*)

SITE: moist, deep soils, good timber sites.
OTHER: Some success in making reasonably good maple syrup from spring sap.



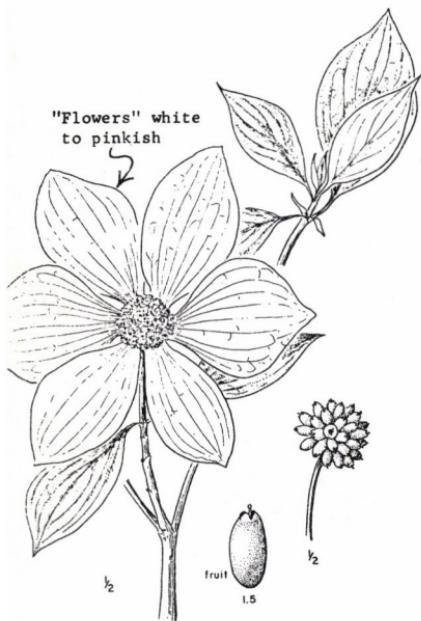
Red alder (*Alnus rubra*)

SITE: Fair to very good timber sites that can grow western hemlock, grand fir, often sitka spruce; increase rapidly after clearcutting, hinder conifer growth and establishment due to closed crown cover; roots fix nitrogen, leaves high in nitrogen - improves the soil; not susceptible to fir root rots.

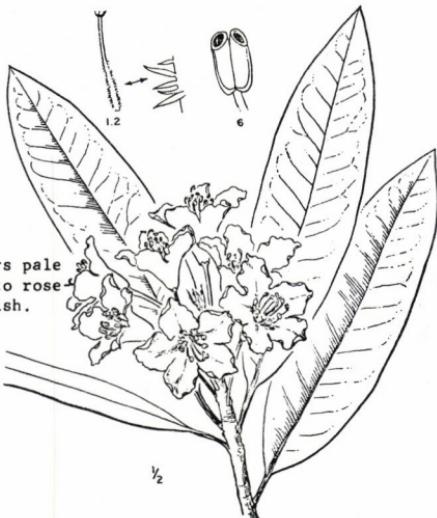
ANIMALS: moderately palatable to big game.
OTHER: excellent firewood - burns hot and clean; choice hardwood for furniture.



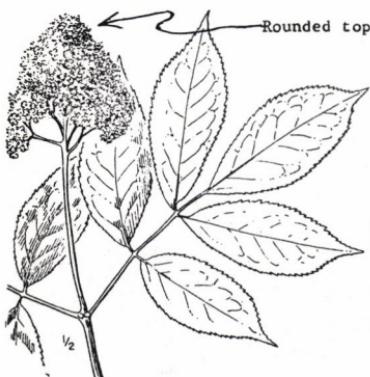
Black cottonwood (*Populus trichocarpa*)
SITE: Wet to moist sites, overflow bottomland.



Pacific dogwood (*Cornus nuttallii*)
 OTHER: highly desirable in the garden due to flower color variability and differences in date of flowering.



Flowers white Fruit black to purple



Rhododendron (*Rhododendron macrophyllum*)
 SITE: size of shrub seems directly correlated with timber site quality - taller shrubs = better site.
 ANIMALS: foliage and flowers poisonous to sheep.
 GARDEN: Easily grown, horticultural stock, state flower of Washington.
 OTHER: leaves and flowers poisonous to people (resinoid).

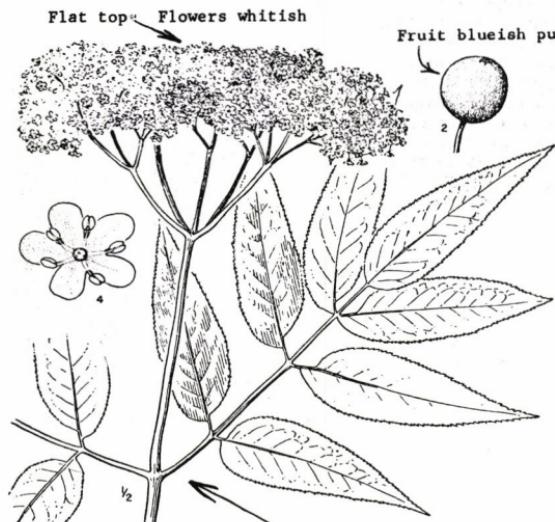
Blue elderberry (*Sambucus racemosa*)

SITE: often unnoticed in uncut stands; often colonizes clearcuts on fairly good sites.

ANIMALS: Foliage highly palatable to big game; fruit highly palatable to birds.

OTHER: Fruit edible raw, cooked, as wine; course stems can be hollowed out and made into flute type instrument.

NOTE: variety *arborescens* has red, yellow, chestnut or even white berries - berries reported poisonous.



Fruit blueish purple



Blue elderberry (*Sambucus cerulea*)
SITE: often unnoticed in uncut forest,
often colonizes clearcuts on fairly
good sites.

ANIMAL: Foliage highly palatable to big
game and livestock; berries highly
palatable to birds.

OTHER: Fruit edible raw, cooked, as
wine (superior wine to *S. racemosa*).

Mountain ash (*Sorbus scopulina*)
OTHER: Fruit eaten raw, cooked, made
into wine.
GARDEN: Highly regarded due to the
brilliantly colored fruit clusters;
propagate from seed or transplants.

Opposite leaves

Alternate leaves

Fruit orange to
scarlet



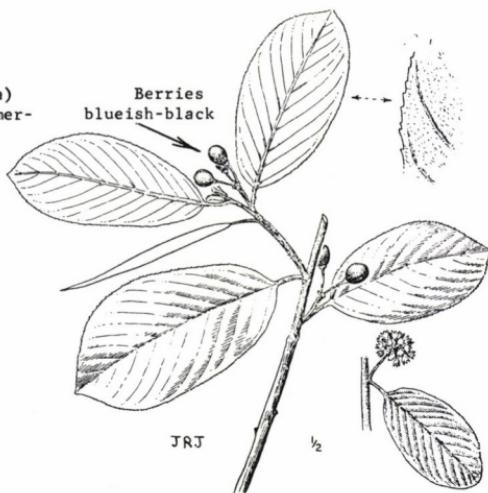
var *cascadensis*



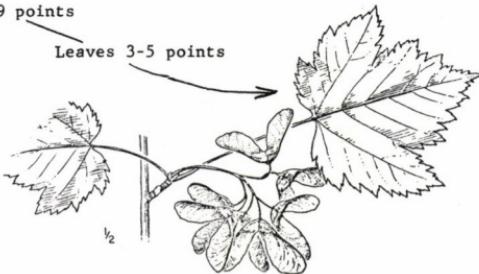
var *scopulina*

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Cascara (*Rhamnus purshiana*)
OTHER: Bark collected commercially for medicinal qualities (laxative); berries are poisonous to people.



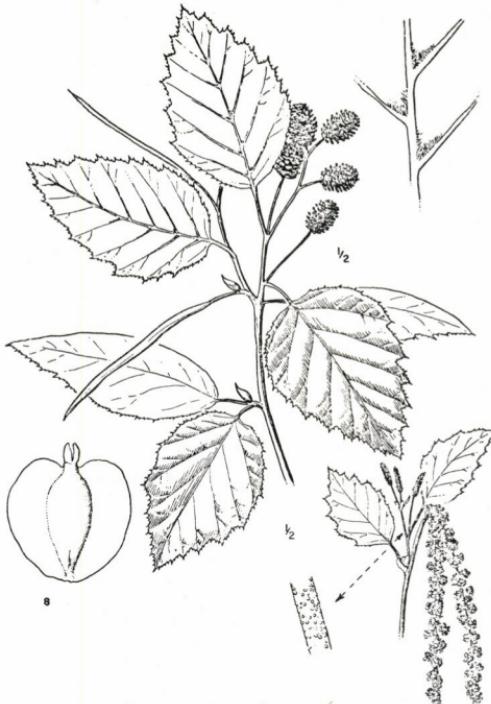
Vine maple (*Acer circinatum*)
SITE: widely distributed, little indicator value by itself; below upper elevations.
ANIMALS: moderately palatable to big game.



Douglas-maple, red maple (*Acer glabrum*)
SITE: widely distributed, tends to occupy slightly drier sites than *A. circinatum*.
ANIMALS: moderately palatable to big game.



Scouler's willow (*Salix scouleriana*)
 SITE: scarce in uncut forest, colonizes
 clearcuts; dryland willow.
 ANIMAL: moderate to high palatability for
 big game, livestock.



Sitka alder (*Alnus sinuata*)
 SITE: Usually indicates snowslide conditions,
 either snow creep or avalanche paths.



Cascade oregongrape, hollygrape
(*Berberis nervosa*)

SITE: Dry sites to somewhat moist; strongly rhizomatous - gives difficulty in competition in clearcuts with tree regeneration; control very difficult.

GARDEN: easily propagated; desirable for yellow flowers and bright blue fruit.

OTHER: Fruit pleasantly acid eaten raw, cooked, made into wine; yellow dye from bark and yellow rhizomes.

Leaflets 13-19

Berry blue

Flowers yellow



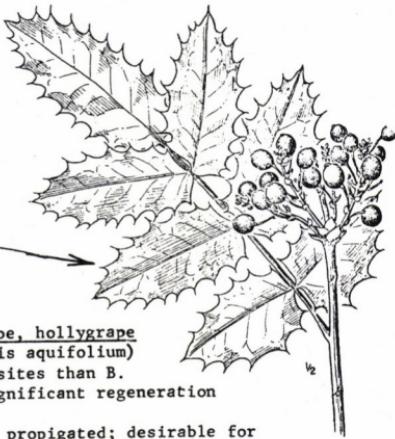
White flowers

Snowberry (Symphoricarpos albus)

SITE: drier, poorer sites, often with some oak, madrone; low timber productivity; significant regeneration problems.

ANIMALS: moderately to highly palatable to White fruit big game and livestock.

OTHER: white, rather tasteless fruit edible raw, or cooked.



Tall oregongrape, hollygrape
(*Berberis aquifolium*)

SITE: Moister sites than *B. nervosa*; significant regeneration problems.

GARDEN: easily propagated; desirable for yellow flowers, blue fruit clumps.

OTHER: Fruit pleasantly acid eaten raw, cooked, used for wine; yellow dye from bark and yellow rhizomes.



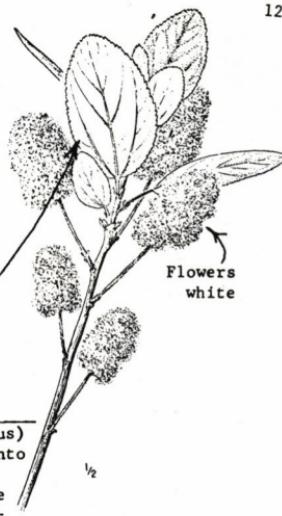
Snowbush (*Ceanothus velutinus*)
 SITE: seeds triggered into germination by fire; can be very aggressive competition in clearcuts.

ANIMAL: Moderate palatability to big game.

OTHER: Flowers, when crushed in water create a lather.

3 prominent leaf veins in *Ceanothus* spp.

JRJ

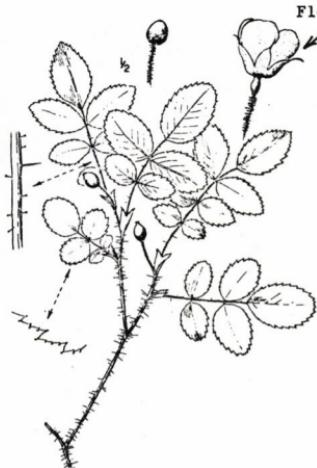


**Redstem ceanothus
(*Ceanothus sanguineus*)**

SITE: seeds triggered into germination by fire, can become aggressive competition in clearcuts.

ANIMAL: highly palatable to big game and livestock.

OTHER: leaves boiled for tea.



Baldhip rose (*Rosa gymnocarpa*)

SITE: drier, poorer sites; low timber productivity; regeneration problems.

ANIMALS: moderately palatable to game.

OTHER: Rose hips edible fresh or dried; dried hips used for wine flavoring (sold commercially); petals eaten fresh or in salads.



Pink spiraea (*Spiraea densiflora*)

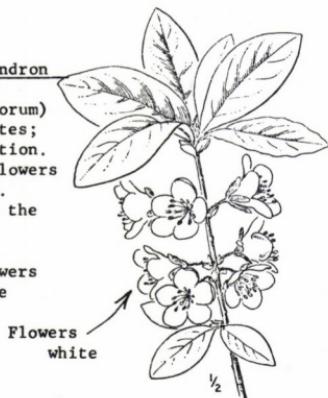
SITE: widely distributed; low to high elevation.



Devil's club
 (*Oplopanax horridum*)
 SITE: Moist to wet, good
 forest production.
 GARDEN: bright red fruit
 and hidious spines
 make plant unusual
 for the garden.
 OTHER: Young stems cooked
 as green; roots peeled
 and chewed.



Azalia, white rhododendron
 (*Rhododendron*
albiflorum)
 SITE: Moist to wet sites;
 good forest production.
 ANIMALS: leaves and flowers
 poisonous to sheep.
 GARDEN: Only fair for the
 garden; cultivated
 varieties better.
 OTHER: Leaves and flowers
poisonous to people
 (resinoid).



Stink current (*Ribes bracteosum*)
 SITE: Moist to wet seepage areas;
 swampy forest.
 OTHER: Berry has a disagreeable taste.

Berries yellow to reddish



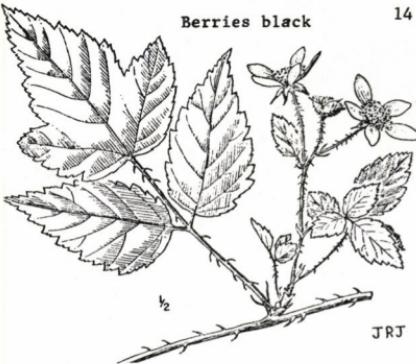
Salmonberry (*Rubus spectabilis*)

SITE: Moist forest sites; often a strong increaser in clearcuts - locally severe regeneration problems.

ANIMALS: Moderately palatable to big game.

OTHER: Fruit yellow to reddish, little flavor, edible raw, cooked, in wine.

Berries black



JRJ

Trailing blackberry (*Rubus ursinus*)

SITE: Increases with disturbance, widespread, limited indicator value.

ANIMALS: Very palatable to big game, often a key winter browse plant.

GARDEN: Undesirable in the garden due to its agresiveness.

OTHER: Black berry has excellent flavor, edible raw, cooked, makes excellent wine; tea made from leaves; has been the original source for several horticultural varieties: mammoth berry, loganberry, youngberry.

Shiny Evergreen leaves

Salal (*Gaultheria shallon*)

SITE: Size tends to indicate site quality, lower (less 18") form with Cascade oregongrape means poor to fair timber site; widely distributed so limited indicator value by itself the more dominant and the fewer kninds of species = poorer sites.

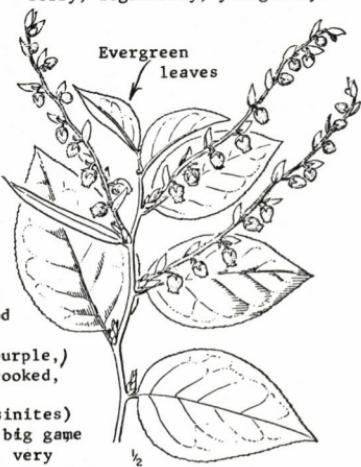
ANIMALS: Palatable to big game
GARDEN: Easily cultivated, good for evergreen leaves.

OTHER: Berries dark blue to purple,) sweet, highly edible raw, cooked, excellent as wine.

Pachistima, Oregon boxwood (*Pachistima myrsinifolia*)

ANIMALS: Moderately to highly palatable to big game

GARDEN: Original source for boxwood hedges, very suited to pruning, shiny evergreen leaves = prime.

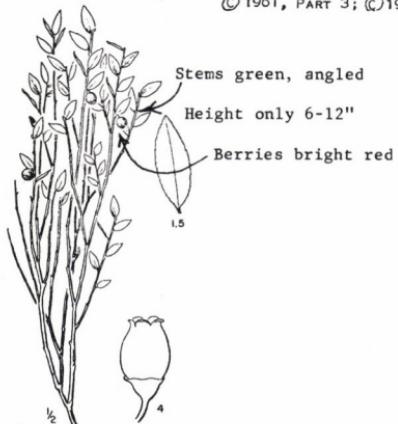


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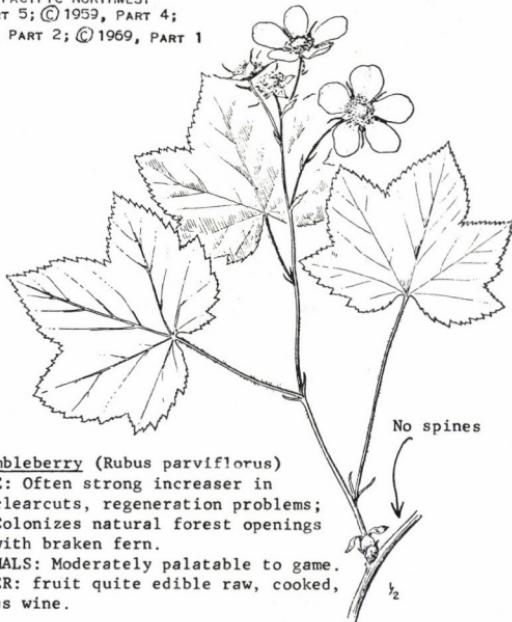


Grouse huckleberry (*Vaccinium scoparium*)

SITE: Indicates cool to cold soil, frost heaving thus regeneration problems; fair to poor forest growth potential.

ANIMALS: Moderate palatability to game.

OTHER: Berries edible raw, cooked, in wine but so small they are tedious to collect.

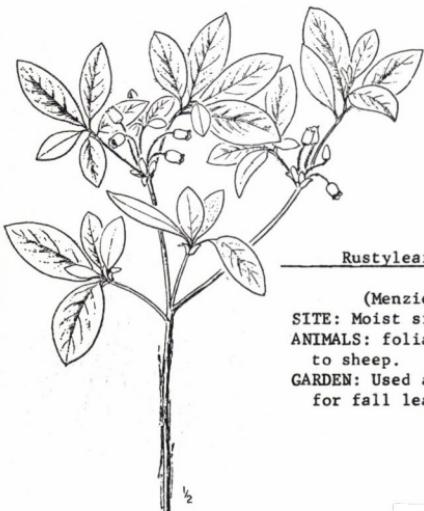


Thimbleberry (*Rubus parviflorus*)

SITE: Often strong increaser in clearcuts, regeneration problems; Colonizes natural forest openings with braken fern.

ANIMALS: Moderately palatable to game.

OTHER: fruit quite edible raw, cooked, as wine.



Rustyleaf, fools huckleberry
 (*Menziesia ferruginea*)

SITE: Moist sites.

ANIMALS: foliage poisonous to sheep.

GARDEN: Used as ornamental for fall leaf color.

Evergreen huckleberry

(*Vaccinium ovatum*)

SITE: Coastal species; sandy, droughty sites; only fair to sometimes good forest growth potential.

GARDEN: desirable for its evergreen leaves.

OTHER: Fronds sold commercially for florist trade (plant pruned to enhance fronds); berry edible raw, cooked, in wine but has musky taste.

Berries purplish-black





Thinleaf, big huckleberry

(*Vaccinium membranaceum*)

SITE: Mid and upper elevation,
Fairly good to poor forest
productivity.
ANIMALS: moderately palatable
to big game, sheep.

OTHER: berries excellent raw,
cooked, as wine; sold
commercially; primary berry
on widely known fields such
as Twin Buttes on the G.P.

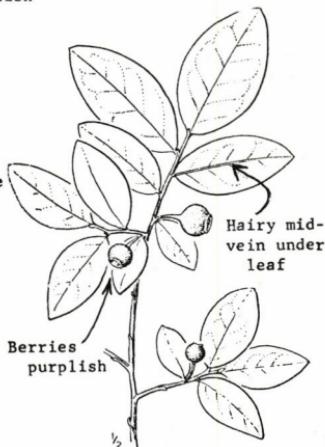


Blueleaf huckleberry

(*Vaccinium deliciosum*)

SITE: Upper elevations, sub-alpine
openings; cold to very cold
soil; severe regeneration
problems.

OTHER: Berries reputed as best,
edible raw, cooked, as wine.

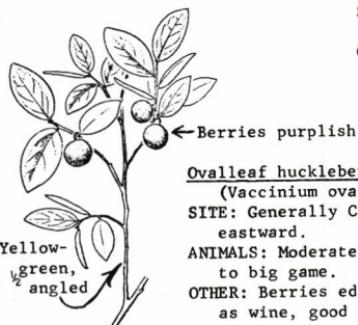
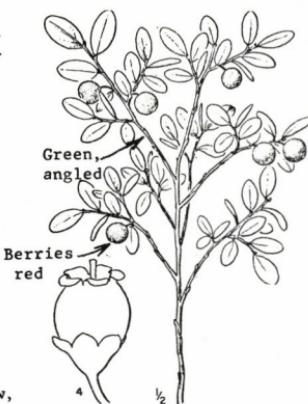


Alaska huckleberry

(*Vaccinium alaskaense*)

SITE: Mid to upper elevations;
cooler sites.

OTHER: Berries rather edible raw,
cooked, in wine; rather tart
taste.



Ovalleaf huckleberry

(*Vaccinium ovalifolium*)

SITE: Generally Cascades and
eastward.

ANIMALS: Moderately palatable
to big game.

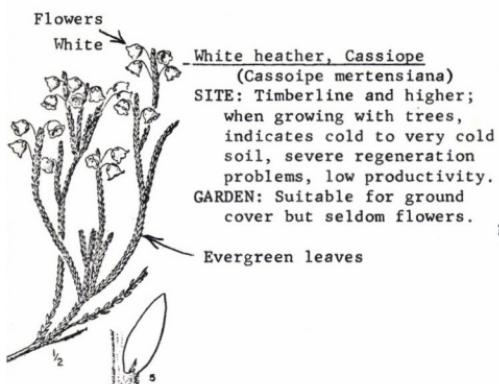
OTHER: Berries edible raw, cooked,
as wine, good flavor but dry.

Red huckleberry (*Vaccinium parvifolium*)

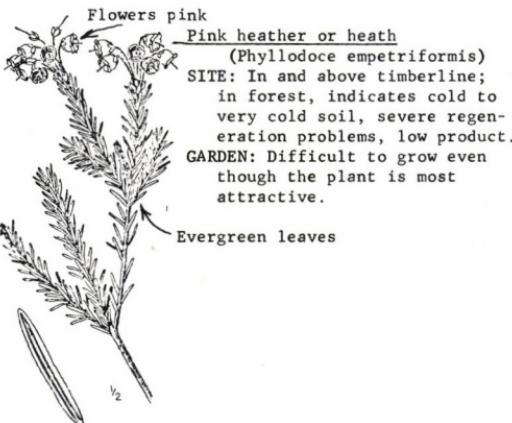
ANIMALS: Patable to big game.

GARDEN: Used as ornamental for
fall colored leaves on green
stems.

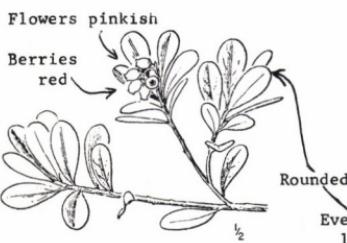
OTHER: Red berries rather sour
but edible raw, cooked, in
wine; good flavor.



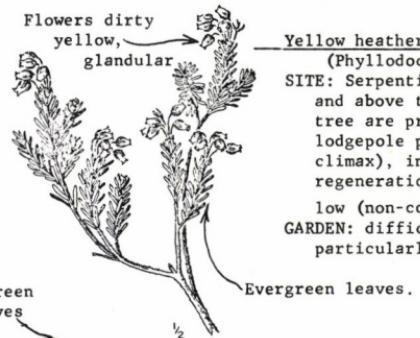
White heather, Cassiope
 (*Cassiope mertensiana*)
 SITE: Timberline and higher;
 when growing with trees,
 indicates cold to very cold
 soil, severe regeneration
 problems, low productivity.
 GARDEN: Suitable for ground
 cover but seldom flowers.



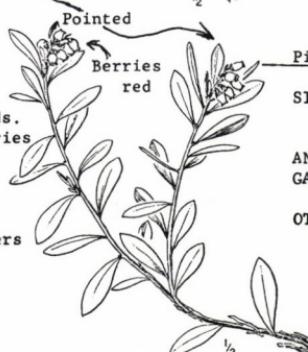
Pink heather or heath
 (*Phyllodoce empetriformis*)
 SITE: In and above timberline;
 in forest, indicates cold to
 very cold soil, severe regen-
 eration problems, low product-
 GARDEN: Difficult to grow even
 though the plant is most
 attractive.



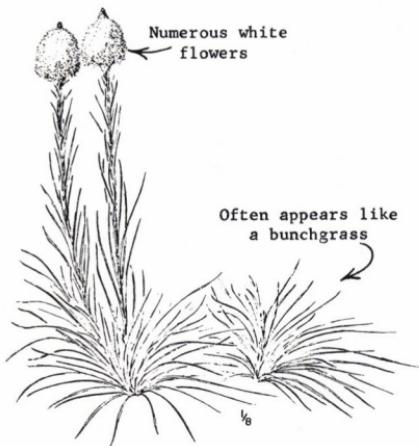
Kinnikinnic, Bearberry
 (*Arctostaphylos uva-ursi*)
 SITE: Generally drier sites, lower
 timber productivity.
 ANIMALS: Berries eaten by game birds.
 GARDEN: Good ground cover, red berries
 attractive.
 OTHER: Red berries eaten raw,
 cooked, made into wine; leaves
 smoked (Indian tobacco), boiled
 for "coffee" for urinary disorders



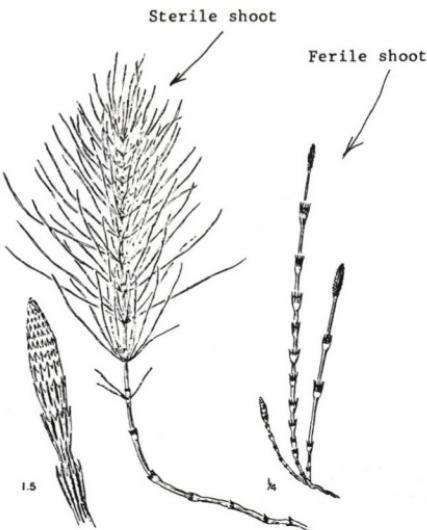
Yellow heather
 (*Phyllodoce glanduliflora*)
 SITE: Serpentine indicator; in
 and above timberline; when
 tree are present (usually
 lodgepole pine, probably as
 climax), indicates extreme
 regeneration problems, very
 low (non-commercial) site.
 GARDEN: difficult to grow; not
 particularly attractive.



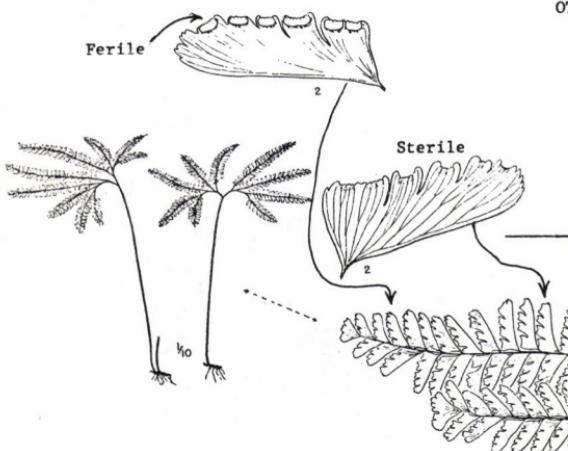
Pinemat manzanita
 (*Artostaphylos nevadensis*)
 SITE: General mid and upper
 elevations, cooler climate;
 drier sites.
 ANIMALS: Berries eaten by game bird
 GARDEN: less desirable ground
 cover than *A. uva-ursi*.
 OTHER: Red berries eaten raw,
 cooked, as wine.



Beargrass (*Xerophyllum tenax*)
SITE: Drier, poorer forest sites; indicates regeneration problems when dominant, rhizomatous from rootstocks, hard to control.
ANIMALS: Unpalatable to any known animals.
GARDEN: Can be easily propagated by planting rhizomes but the leafy "bunch" dies back after flowering; does not flower every year.
OTHER: Rootstocks roasted or boiled; leaves used for weaving and decoration.



Horsetail (*Equisetum arvense*)
SITE: Generally disturbed areas or moist to wet sites; indicates abundant spring soil moisture.
ANIMALS: Moderately palatable to big game; poisonous to horses.
OTHER: Sterile shoots with long leaves used to scour pots; peel outer tissue and eat sweet pulp raw; boil young heads like asparagus, cover with flour and fry.



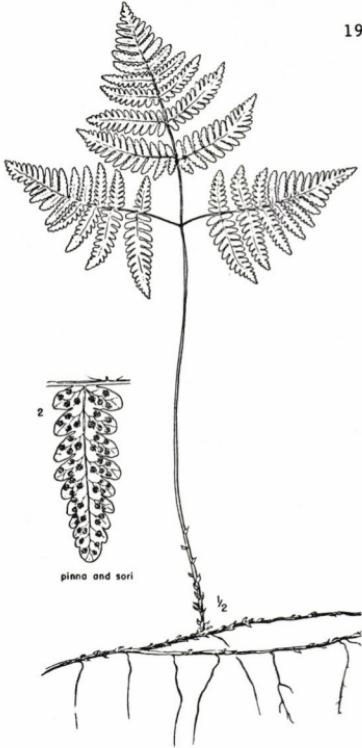
Maidenhair fern (*Adiantum pedatum*)
SITE: Moist forest sites, average or better productivity.
GARDEN: One of the choicest ferns, green leaves and purple to black stems.



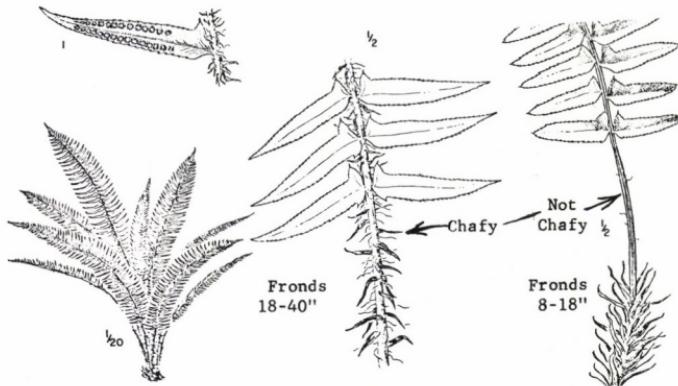
Lady fern (*Athyrium filix-femina*)
SITE: Moist soil; good forest productivity.
GARDEN: Good summer garden fern but dead fronds detract during winter months.



Bracken fern (*Pteridium aquilinum*)
SITE: Often drier sites but still fair to good forest productivity; recovers rapidly following fire, may increase at expense of other plants; when dominant, may smother tree seedlings with fronds; natural opens at upper elev.
ANIMALS: Moderately to low palatability for livestock - but poisonous, cumulative over several months.
OTHER: very young fiddleneck heads edible raw or cooked, old fronds poisonous.



Woodfern (*Gymnocarpium dryopteris*)
(*Dryopteris disjuncta*)
GARDEN: Easiest fern to transplant (by rhizomes) to the garden but dead fronds detract in winter.



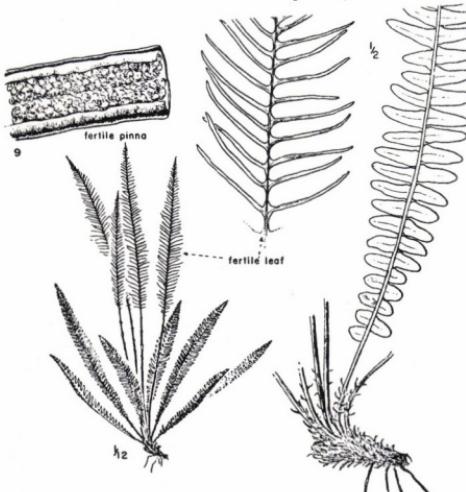
Sword fern (Polystichum munitum)

Var. munitum

SITE: Good forest sites; moist, deep soil; moderate to no regeneration problems.
 ANIMALS: Moderately palatable to big game.
 GARDEN: Easy to grow; evergreen fronds desirable during winter months.
 OTHER: Fronds harvested commercially for the florist trade (requires pruning for best development)

Var. imbricans

SITE: Poor forest sites, dry, shallow, gravelly soils; regeneration problems
 ANIMALS: Moderately palatable to game.
 GARDEN: Easy to grow, significantly shorter than v. munitum.



Deer fern (Blechnum spicant)

SITE: Moist soils; good forest productivity.
 ANIMALS: Palatable to very palatable for livestock and big game.
 GARDEN: Easily propagated in the garden.



Holly fern (*Polystichum mohrioides*)

SITE: Serpentine indicator - nearly endemically limited to serpentine; from sea level to above timberline; poor forest sites.



Fronds
evergreen

Rock brake

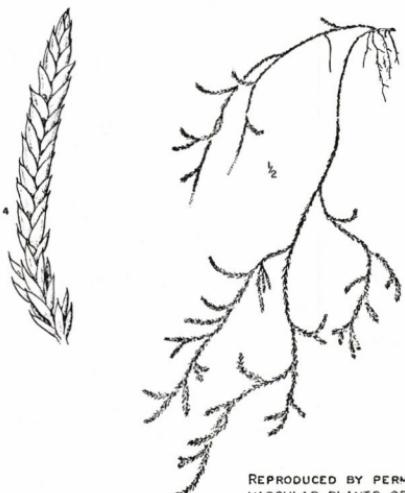
(*Cryptogramma densa*)

SITE: Serpentine indicator; poor soil, stony, droughty; poor forest site.

GARDEN: Desirable for the winter green fronds; needs dry, rocky soil.



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Selaginella (*Selaginella oregana*)

SITE: Rain forest plant; moist to wet environment; good to very good forest sites; found hanging on trees or sprawled on the ground.

GARDEN: Does poorly in the garden.

Flowers white
Fruit greenish-yellow

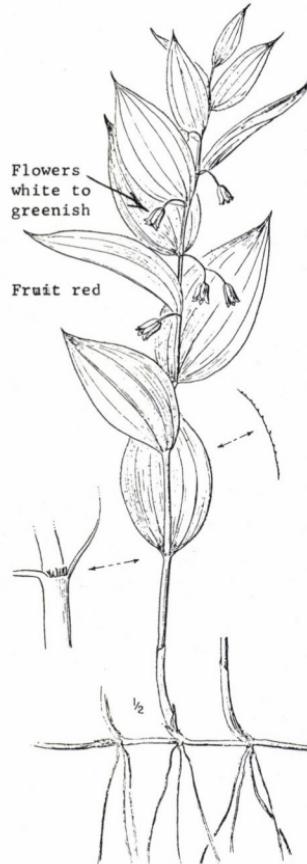


Solomonplume
(*Smilacina stellata*)

SITE: Moist forest and natural openings in the forest (to wet).
OTHER: Caution - causes loosening of the bowels (medicinal); berries edible raw, cooking reduces purgative and improves flavor.

Flowers white to greenish

Fruit red

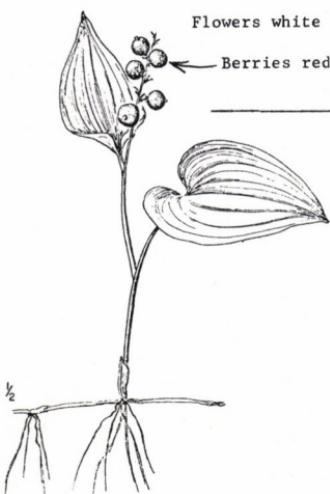


Flowers white

Berries red

False lily-of-the-valley
(*Maianthemum dilatatum*)

SITE: Moist forest.
ANIMALS: Moderately palatable to big game.
GARDEN: Easily propagated but becomes aggressive.
OTHER: Red berry may be poisonous

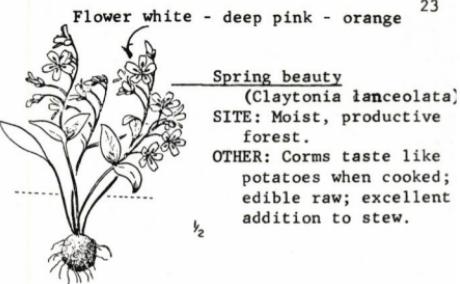


Twisted stalk (*Streptopus roseus*)

SITE: Good, deep soil; some sub-irrigation; good to very good productivity.
OTHER: Caution - medicinal, berries cause loosening of bowels (purgative); berries edible raw, cooked in soup or stew.



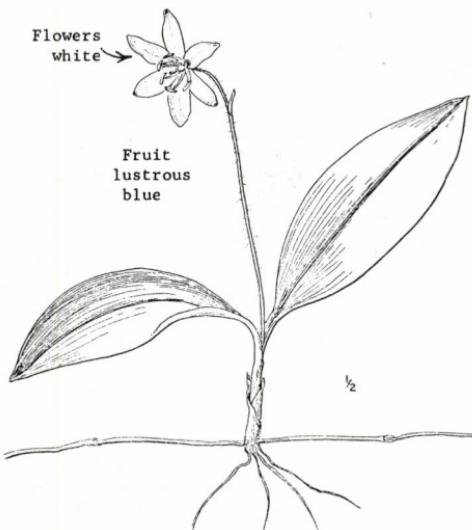
Skunk cabbage
(*Lysichiton americanum*)
SITE: Wet, swampy areas,
often in or near stand-
ing water.
GARDEN: Easily transplanted
by propagation of the
underground stem into or
adjacent to water.



Spring beauty
(*Claytonia lanceolata*)
SITE: Moist, productive
forest.
OTHER: Corms taste like
potatoes when cooked;
edible raw; excellent
addition to stew.

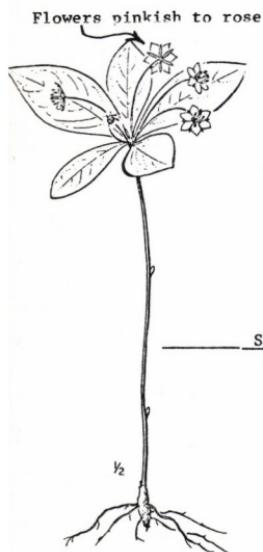
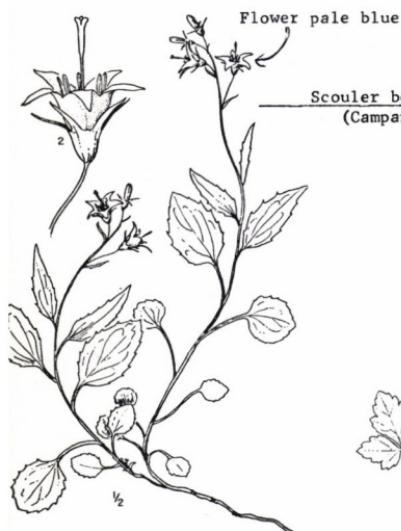


Trillium (*Trillium ovatum*)
SITE: Moist to wet forest and
openings; good forest
productivity.
GARDEN: Easily grown from
seed - NOTE: plant is
somewhat rare and picking
should be discouraged.



Clintonia (*Clintonia uniflora*)
SITE: Moist forest sites; good productivity.
GARDEN: Easily grown from the rhizome.
OTHER: Caution - berry may be poisonous.

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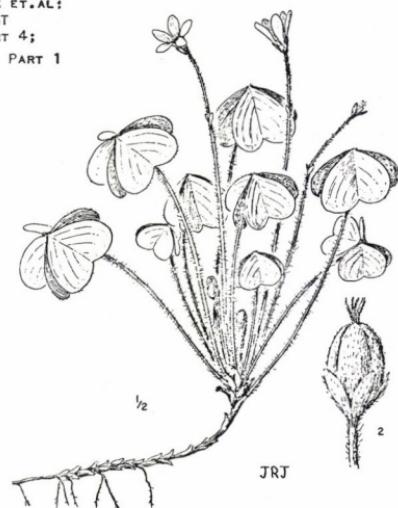


Scouler bellflower
(*Campanula scouleri*)

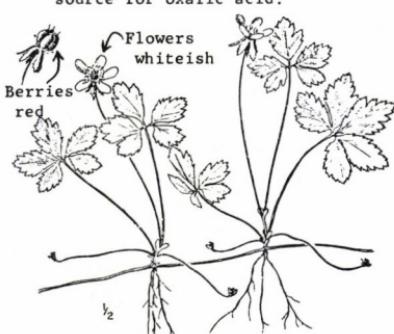


Coolwart, foamflower
(*Tiarella trifoliata*)
SITE: Moist sites.

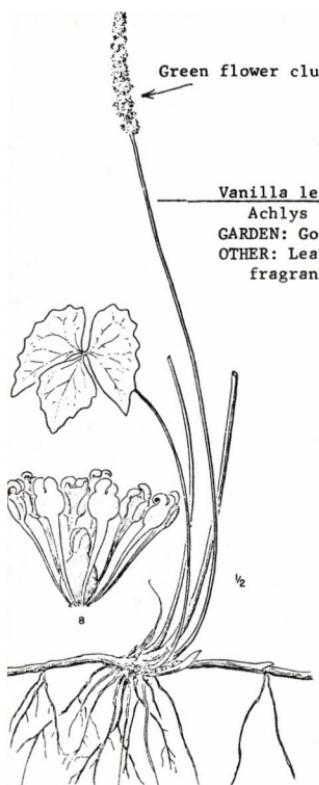
Star flower
(*Trientalis latifolia*)



Oxalis (*Oxalis oregana*)
SITE: Moist forest of good productivity
ANIMALS: Moderately palatable to
big game.
GARDEN: Strongly rhizomatous, aggres-
sive, not recommended.
OTHER: Leaves edible but with sharp
or sour taste; ferment leaves
slightly for salad; original
source for oxalic acid.



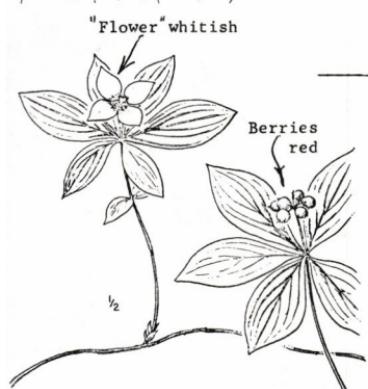
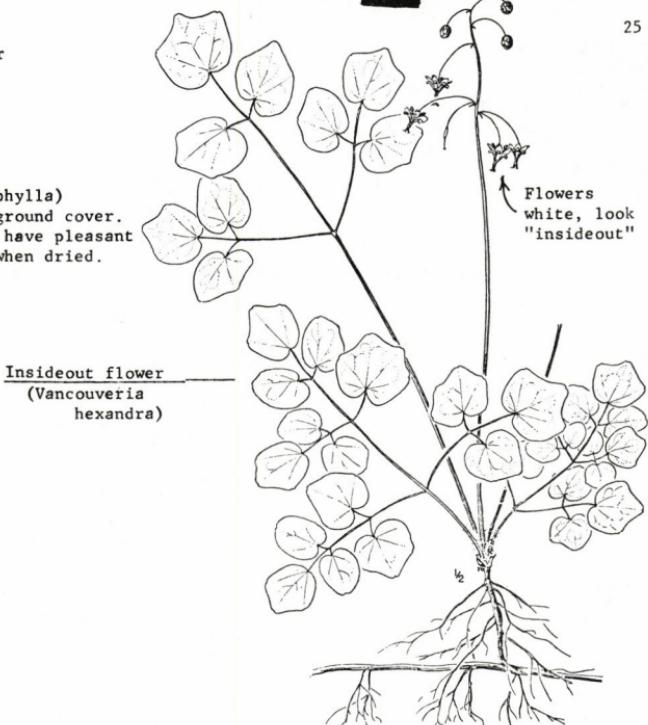
Strawberryleaf blackberry (*Rubus pedatus*)
SITE: Moist forest sites, good production.
ANIMALS: Moderate palatability to game.
GARDEN: Easy to establish as ground cover.
OTHER: Berries edible raw, cooked, as
wine; leaves make nice tea.



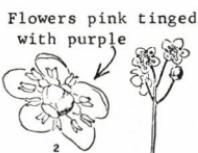
Green flower cluster

Vanilla leaf
(Achlys triphylla)
 GARDEN: Good ground cover.
 OTHER: Leaves have pleasant fragrance when dried.

Insideout flower
(Vancouveria hexandra)



Bunchberry dogwood
(Cornus canadensis)
 SITE: generally cooler sites.
 GARDEN: Desirable for ground cover for flowers and red fruit; transplant by small sod with rhizomes.
 OTHER: Red berries very edible raw, cooked, as wine; boil roots for cold remedy.



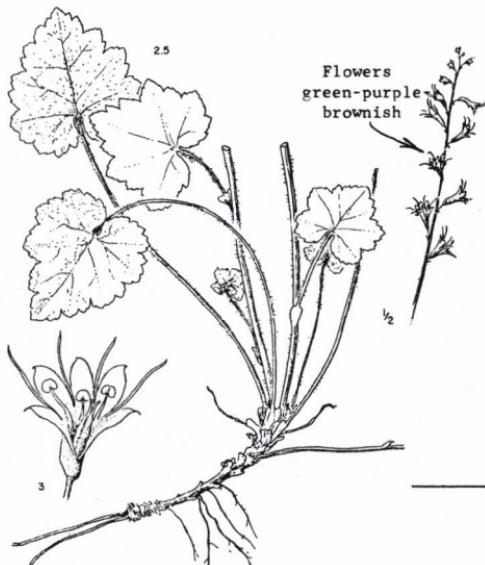
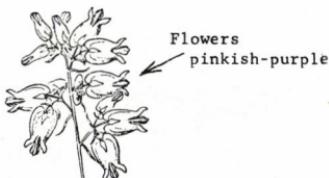
Prince's pine, pipsissewa
(Chimaphilla umbellata)
 SITE: Drier, poorer sites.
 OTHER: leaves may be nibbled raw; roots ingredient in rootbeer.



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Valerian
(*Valeriana sitchensis*)
SITE: Mid and upper eleva-
tions; sometimes the
dominant in upper eleva-
tion forest openings;
moist site indicator.



Bleeding heart (*Dicentra formosa*)
GARDEN: very common in the garden.
OTHER: Poisonous to people (alkaloid)

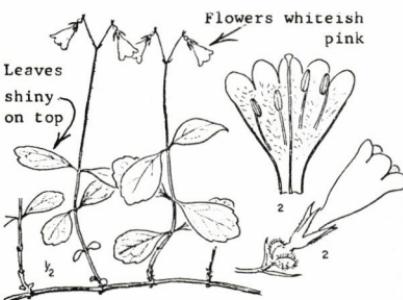
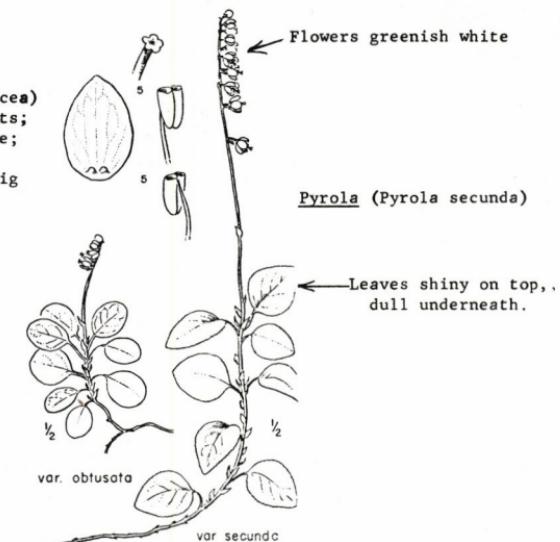
Youth-on-age, tolmiea)
(*Tolmiea menziesii*)
SITE: Moist sites, lower elevations.



Pearly everlasting
(*Anaphalis margaritacea*)

SITE: common in clearcuts;
indicates disturbance;
rhizomatous.

ANIMALS: Palatable to big
game



Twinflower (*Linnaea borealis*)

GARDEN: trailing; excellent
ground cover, easily intro-
duced into the garden.

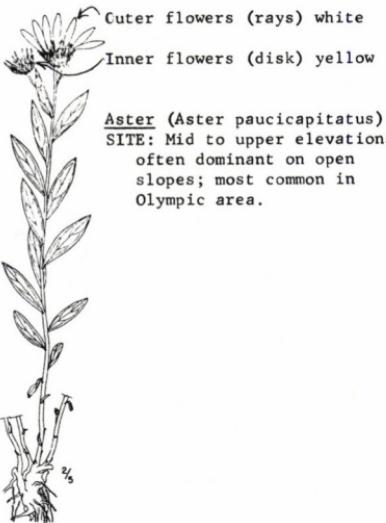
Stinging nettle (*Urtica dioica*)

SITE: Wet to moist sites, seeps.

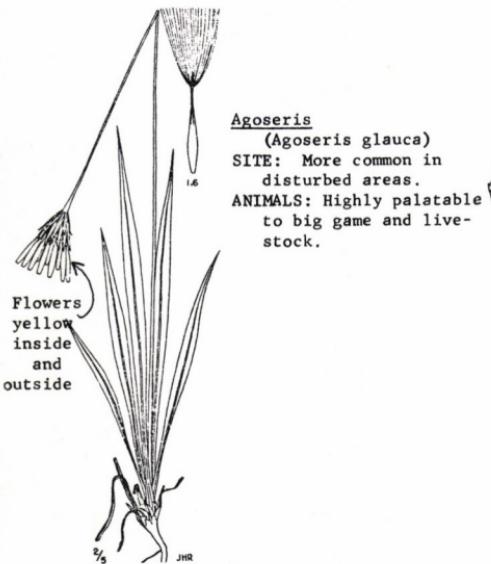
OTHER: Young shoots boiled like spinach;
Mature plants beaten for fiber; yellow
dye by boiling roots.



Flowers white-pink
Miner's lettuce
(*Montia sibirica*)
SITE: Often in disturbed
areas.
OTHER: Entire plant quite
edible raw as in salad.



Cuter flowers (rays) white
Inner flowers (disk) yellow
Aster (*Aster paucicapitatus*)
SITE: Mid to upper elevations;
often dominant on open
slopes; most common in
Olympic area.



Agoseris
(*Agoseris glauca*)
SITE: More common in
disturbed areas.
ANIMALS: Highly palatable
to big game and live-
stock.



Saussurea (*Saussurea americana*)
SITE: Mid to high elevation;
natural openings of moist
to dryish sites; tallus
slopes.

Flowers violet-purple



Bull thistle
(*Cirsium vulgare*)
SITE: Commonly invades clear-cuts and other kinds of disturbance. (Introduced)
ANIMALS: Flowers eaten by big game (same as artichoke).
OTHER: Roots edible raw, boiled, or roasted; peeled stems cooked as greens.



Woodland groundsel (*Senecio sylvaticus*)
SITE: Annual, common invader in clearcuts and other disturbed areas. (Introduced from Europe)



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Fireweed (*Epilobium angustifolium*)
SITE: Common invader in clearcuts and other disturbed areas.
ANIMALS: Palatable to big game and livestock.
OTHER: Excellent source of nectar for honey; Young shoots and leaves boiled like asparagus; young leaves as salad greens; dried leaves for tea; pith of stems in soup.

Flowers whiteish



Wooly pussytoes

(*Antennaria lanata*)

SITE: Alpine and sub-alpine;
 open areas or chalky soil,
 poor sites; may indicate
 poor range condition.

Flowers yellow green



Falsehellebore

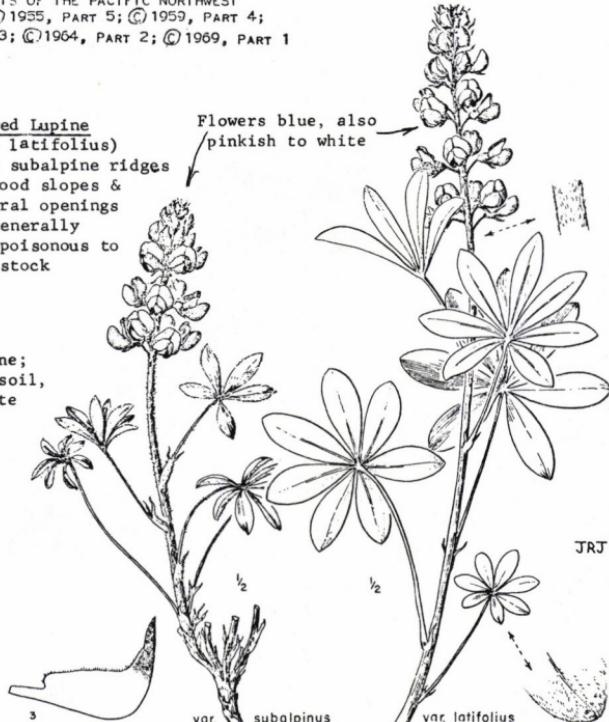
(*Veratrum viride*)

SITE: upper elevations and
 sub-alpine natural open-
 ings; wet to swampy sites,
 sub-irrigated; good soil.

ANIMALS: Poisonous to livestock.
 OTHER: Poisonous to people
 (alkaloid)

Broad-leaved Lupine
 (*Lupinus latifolius*)
 Site: open subalpine ridges
 to wood slopes &
 natural openings
 Animals: generally
 non-poisonous to
 livestock

Flowers blue, also
 pinkish to white

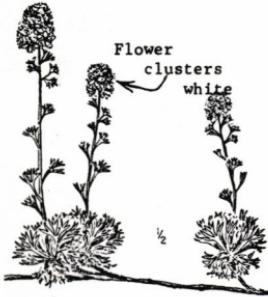


Phlox (*Phlox diffusa*)

SITE: Natural openings at mid to upper
 elevations, sub-alpine and alpine;
 dry, harsh sites; serpentine indicator.



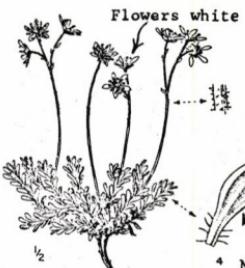
Flowers blue fading
 to nearly white



Mat forming

Lutkea (Lutkea pectinata)

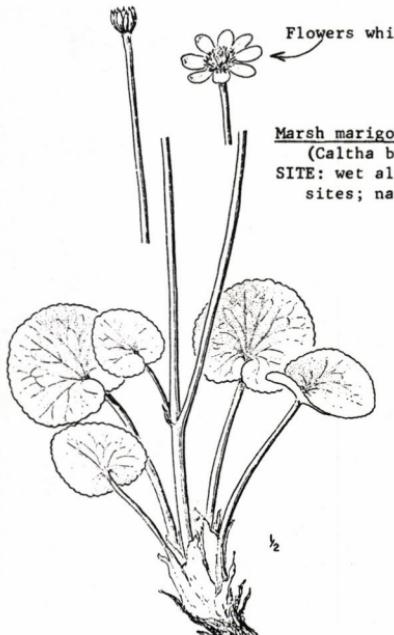
SITE: Sub-alpine to alpine sites; often found between clumps or groves of mountain hemlock or sub-alpine fir - indicates late snowbank areas, cold soils, extreme regeneration problems.
 GARDEN: Easily propagated by cuttings and divisions for the garden as a ground cover.



Tolmiea saxifrage
(*Saxifraga tolmiei*)

SITE: Sub-alpine to alpine; moist to wet locations; indicates late snow areas; often in talus.
 GARDEN: Attractive but difficult to grow in the rock garden.

Leaves thick and fleshy
 4 Mat forming



Flowers whiteish

Marsh marigold

(*Caltha biflora*)
 SITE: wet alpine and sub-alpine sites; natural forest openings.

Monkeyflower (Mimulus lewisii)

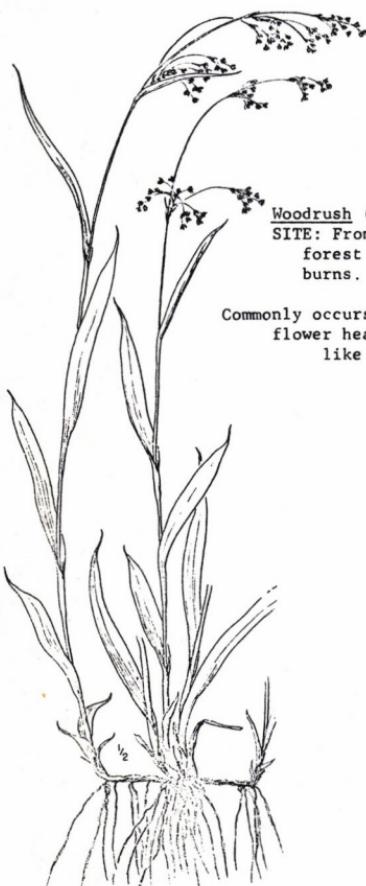
SITE: Mid and upper elevations in natural openings; wet areas with sub-irrigation or along water.
 GARDEN: Does poorly in the garden.
 OTHER: Leaves edible as salad greens.

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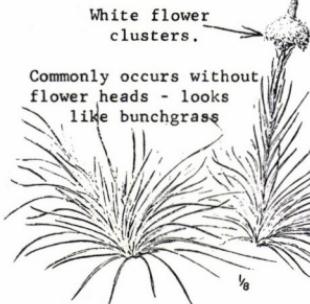
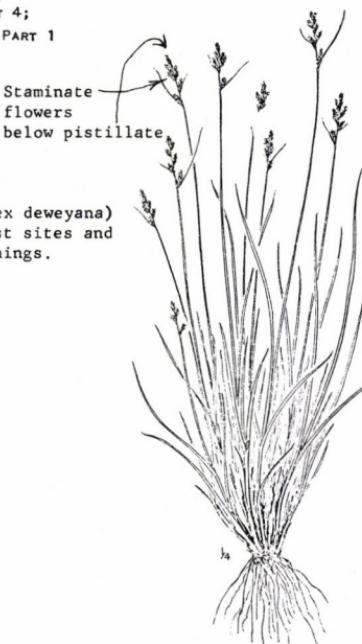
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Woodrush (*Luzula parviflora*)
SITE: From moist to fairly dry
forest sites; upper elevation
burns.

Commonly occurs without
flower heads - looks
like a carpet of
grass.

Dewey sedge (*Carex deweyana*)
SITE: Moist forest sites and
in forest openings.



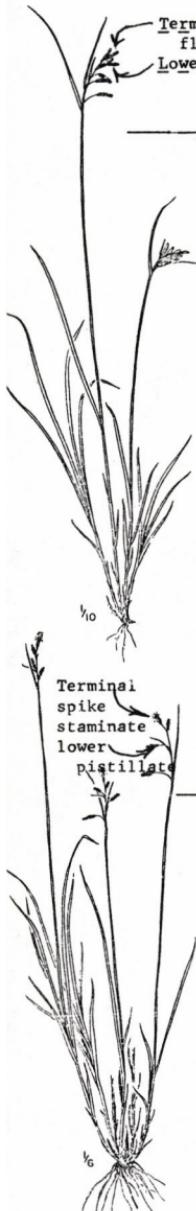
Beargrass (*Xerophyllum tenax*)
SITE: on drier, poorer forest sites;
indicates regeneration problems
when dominant.

GARDEN: Can be propagated by rootstocks
but leaves die back after flowering -
does not flower every year.

OTHER: Rootstocks boiled or roasted;
leaves woven.

Terminal spike: staminate flowers below pistillate.
Lower spikes all pistillate

Tall sedge
(*Carex obnupta*)
SITE: In water or very wet ground, wet meadows; often with willow.



Terminal spike
staminate
lower
pistillate

Showy sedge
(*Carex spectabilis*)
SITE: Moist to wet sites at mid to upper elevations and above timberline; meadows.



Merten's sedge (*Carex mertensii*)
SITE: Forested areas or forest openings.

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Terminal
spike
staminate;
lower
pistillate



Black sedge
(*Carex nigricans*)
SITE: Sub-alpine open-
ings to alpine; moist
to dry meadows; late
snow fields

Woodrush sedge
(*Carex luzulina*)
SITE: Bogs, wet meadows.

Green fescue
(*Festuca viridula*)
SITE: Bunchgrass, sub-
alpine and alpine; in
forest openings; often
tree "invasion" in
stands.
ANIMALS: Highly palatable
to all large herbivores,
decreases under heavy
utilization.

Staminate
flowers
above pistillate



Very short
awns

